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73	15	95
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76	15	95
77	15	95
78	15	95
79	15	95
80	15	95
81	15	95
82	15	95
83	73	96
84	15	95
85	15	95
86	15	95
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111	15	95
112	15	95
113	15	95
114	15	95
115	15	95
116	15	95
117	15	95
118	55	95
119	15	95
120	15	95
121	15	95
122	15	95
123	1	30
124	15	95
125	15	95
126	15	95
127	15	95
128	15	95
129	15	95
130	15	95
131	15	95
132	15	95
133	15	95
134	15	95
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136	15	95
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167	15	95
168	15	95
169	15	95
170	15	95

ATTACHMENT B

Re: FCC Docket #92-91
Order Designating Issues for Investigation

COST OF MONEY (COM)

12.26%

VS.

10.66%

Per CYCLE/MSEC

	DIFFERENCE*	% DIFFERENCE
ANALOG TECH 1A	\$.000091	2.84%
DIGITAL SWITCH TECHNOLOGY 1	\$.00648	1.54%
DIGITAL SWITCH TECHNOLOGY 2	\$.09333	3.88%

Per FEATURE ANI investment, Per call

	DIFFERENCE*	% DIFFERENCE
ANALOG TECH 1A	\$.14461	.90%
DIGITAL SWITCH TECHNOLOGY 1	\$.00247	1.55%
DIGITAL SWITCH TECHNOLOGY 2	\$.056	2.39%

* Investments calculated @ 13.04% less Investments calculated
@ 11.25% (12.26% & 10.66% nominal rate, respectively.)

ATTACHMENT C

SUMMARY OF ATTACHMENT C

The work papers show the cost development for all the BSEs submitted by Pacific Bell except for Verify Integrity of Subscriber Line, Network Reconfiguration, Nonhunting Number, Hunt Group Overflow, Preselection of Data Services, and Reverse Charge Acceptance - Packet. Network Reconfiguration is not available on 1AESS switches. Verify Integrity of Subscriber Line did not have any 1AESS investment. Nonhunting Number and Hunt Group Overflow do not have any additional investment beyond that required for Multiline Hunting. Preselection of Data Services and Reverse Charge Acceptance - Packet also have no additional investment beyond that required for associated with the Public Packet Switching X.75 BSA.¹

The workpapers start with the same investment by technology type for each BSE (shown on pages 1.A.1 and 1.B.2) as in Pacific Bell's filings (Transmittals 1567 filed November 1, 1991 and 1571 filed February 21, 1992). The forecasted growth by switch type is modified to show 0% for the 1AESS (pages 1.A.1 line 9 and 1.B.1 line 5). The remaining calculations are identical to those in Pacific Bell's previous filings. Detailed cost support for the BSEs is shown on pages 1.A.4 through 1.A.11 and 1.B.4 through 1.B.9.

¹ Nonhunting Number and Hunt Group Overflow are provided at no extra charge with Multiline Hunting. Preselection of Data Services and Reverse Charge Acceptance are provided with the Public Packet Switching X.75 BSA at no additional charge.

Cost including a 7.84% LAESS weighting were compared with 0% costs based on a LAESS weighting (see Attachment C, page 1.A.3 for the BSEs filed on November 1, 1991, and page 1.B.2 for the BSEs filed on February 21, 1992.) The costs are slightly higher for six of the BSEs when LAESS switches are excluded (Multiline Hunting, CO Announcement, Uniform Call Distribution, Message Desk, Message Waiting Indicator - Audible, and Message Waiting Indicator - Visual.) The costs for the other BSEs are lower when the LAESS switches are excluded.

Rates including the 7.84% LAESS and with 0% LAESS are compared on page 1.A.3 for the BSEs filed on November 1, 1991, and on page 1.B.3 for the BSEs filed on February 21, 1992. The rates would be slightly higher for two of the BSEs when LAESS switches are excluded (CO Announcement and Uniform Call Distribution.) The rates for six of the BSEs would be unchanged (Multiline Hunting, Three Way Call Transfer, Called Directory Number Delivery via DID per 100 Block, Message Desk, Message Waiting Indicator - Audible, and Message Waiting Indicator - Visual.) The rates for six BSEs would be reduced when LAESS switches are excluded (Automatic Number Identification, UCD with Queuing, Call Denial, Code Denial, Called Directory Number Delivery via DID per Trunk, and Make Busy Key.) Of these six BSEs, only Automatic Number Identification would have a substantially reduced rate if LAESS switches are excluded from the cost work.

Workpapers

1 BSE Cost Development

2

3

4

5 Percent Forecasted Growth for Switched Access by Equipment Type (DMS, 1A, 5E)

6

7 DMS 1A 5E SOURCE

8

9 Switched Access 40.00% 0.00% 60.00% 11/90 Construction Budget View
with 1AESS Investment Set to 0%

10

11

12

13

14 Incremental Cost Product Investment by Switch Type

15

16 DMS 1A 5E

17

18 Auto Number Id per Busy Hour Cal \$0.17 \$18.89 \$2.34 SCIS (See Transmittal 1567)

19 Hunt Group Arrangement per Line \$10.35 \$1.76 \$2.55 SCIS (See Transmittal 1567)

20 CO Announcement per Group \$1,270.82 \$2,736.89 \$4,588.34 SCIS (See Transmittal 1567)

21 UCD per Line \$185.53 \$12.41 \$21.94 SCIS (See Transmittal 1567)

22 UCD with Queuing per Line \$25.26 \$59.44 \$12.27 SCIS (See Transmittal 1567)

23 Three Way Call Transfer per Line \$2.45 \$3.44 \$0.91 SCIS (See Transmittal 1567)

24 Call Denial per Line \$26.93 \$40.51 \$4.31 SCIS (See Transmittal 1567)

25 Service Code Denial per Line \$26.93 \$40.51 \$4.31 SCIS (See Transmittal 1567)

26

27

28

29

30

31 Incremental Cost Product Investment by Analog and Digital

32

33 Analog Digital Total
34 Invest. Invest. Invest.

35 (1A) (DMS & 5E)

36 Auto Number Id per Busy Hour Cal \$0.00 \$1.47 \$1.47 (Line 18) * (Line 9)

37 Hunt Group Arrangement per Line \$0.00 \$5.67 \$5.67 (Line 19) * (Line 9)

38 CO Announcement per Group \$0.00 \$3,261.33 \$3,261.33 (Line 20) * (Line 9)

39 UCD per Line \$0.00 \$87.38 \$87.38 (Line 21) * (Line 9)

40 UCD with Queuing per Line \$0.00 \$17.47 \$17.47 (Line 22) * (Line 9)

41 Three Way Call Transfer per Line \$0.00 \$1.53 \$1.53 (Line 23) * (Line 9)

42 Call Denial per Line \$0.00 \$13.36 \$13.36 (Line 24) * (Line 9)

43 Service Code Denial per Line \$0.00 \$13.36 \$13.36 (Line 25) * (Line 9)

44

45

46

Workpapers

47 Calculation of Rates for BSEs

48

49

50 Costs	Direct	Direct +	SOURCE
51		Overheads	
52 Auto Number Id per Busy Hour Cal	\$0.4779	\$0.6015	Page 1.A.4 (Lines 36 and 41)
53			
54 Ratio of Total Messages to	2,600		Engineering Study
55 Busy Hour Messages			
56			
57 Auto Number Id per Message	\$0.00018	\$0.00023	per Message (Line 52) / (Line 54)
58 Hunt Group Arrangement per Line	\$0.1534	\$0.1931	per Month Page 1.A.5 (Lines 36 and 41) / 12
59 CO Announcement per Group	\$88.2307	\$111.0476	per Month Page 1.A.6 (Lines 36 and 41) / 12
60 UCD per Line	\$2.3638	\$2.9751	per Month Page 1.A.7 (Lines 36 and 41) / 12
61 UCD with Queuing per Line	\$0.4725	\$0.5947	per Month Page 1.A.8 (Lines 36 and 41) / 12
62 Three Way Call Transfer per Line	\$0.0413	\$0.0520	per Month Page 1.A.9 (Lines 36 and 41) / 12
63 Call Denial per Line	\$0.3614	\$0.4548	per Month Page 1.A.10 (Lines 36 and 41) / 12
64 Service Code Denial per Line	\$0.3614	\$0.4548	per Month Page 1.A.11 (Lines 36 and 41) / 12

65

66

67

68 Prices for BSEs without 1AESS Premium Non-Premium

69

70 Auto Number Id per Message	\$0.00023	NA	per Message
71 Hunt Group Arrangement per Line	\$0.20	\$0.09	per Month
72 CO Announcement per Group	\$111.00	\$49.95	per Month
73 UCD per Line	\$3.00	\$1.35	per Month
74 UCD with Queuing per Line	\$0.60	\$0.27	per Month
75 Three Way Call Transfer per Line	\$0.05	\$0.02	per Month
76 Call Denial per Line	\$0.45	\$0.20	per Month
77 Service Code Denial per Line	\$0.45	\$0.20	per Month

78

79 Note: Non-Premium rates = Premium rates * 0.45 rounded to the nearest cent.

80

Workpapers

81 Comparison of Costs with and without 1AESS

82

83 Product	Total Cost with 1AESS	Total Cost without 1AESS	SOURCE
84			
85			
86			
87 Auto Number Id per Message	\$0.00041	\$0.00023	Transmittal 1567 and Line 57
88 Hunt Group Arrangement per Line	\$0.1819	\$0.1931	Transmittal 1567 and Line 58
89 CO Announcement per Group	\$108.5497	\$111.0476	Transmittal 1567 and Line 59
90 UCD per Line	\$2.7698	\$2.9751	Transmittal 1567 and Line 60
91 UCD with Queuing per Line	\$0.6828	\$0.5947	Transmittal 1567 and Line 61
92 Three Way Call Transfer per Line	\$0.0557	\$0.0520	Transmittal 1567 and Line 62
93 Call Denial per Line	\$0.5110	\$0.4548	Transmittal 1567 and Line 63
94 Service Code Denial per Line	\$0.5110	\$0.4548	Transmittal 1567 and Line 64

95

96

97

98

99 Comparison of Rates with and without 1AESS

100

101 Product	Prem. Rate with 1AESS	Prem. Rate without 1AESS	
102			
103			
104			
105 Auto Number Id per Message	\$0.00041	\$0.00023	Transmittal 1567 and Line 70
106 Hunt Group Arrangement per Line	\$0.20	\$0.20	Transmittal 1567 and Line 71
107 CO Announcement per Group	\$109.00	\$111.00	Transmittal 1567 and Line 72
108 UCD per Line	\$2.75	\$3.00	Transmittal 1567 and Line 73
109 UCD with Queuing per Line	\$0.70	\$0.60	Transmittal 1567 and Line 74
110 Three Way Call Transfer per Line	\$0.05	\$0.05	Transmittal 1567 and Line 75
111 Call Denial per Line	\$0.50	\$0.45	Transmittal 1567 and Line 76
112 Service Code Denial per Line	\$0.50	\$0.45	Transmittal 1567 and Line 77

Switched Access BSE Workpapers - Automatic Number Identification

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Auto Number Id per Busy Hour Call	\$0.00	\$1.47	\$1.47 Page 1.A.1 (Line 36)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$0.1168	\$0.1168 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$0.1424	\$0.1424 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.0523	\$0.0523 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$0.1179	\$0.1179 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0045	\$0.0045 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$0.4338	\$0.4338 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.0297	\$0.0297 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.0188	\$0.0188 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$0.4779	\$0.4779 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$0.1236	\$0.1236 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$0.6015	\$0.6015 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$1.4720	\$1.4720 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$1.4720	\$1.4720 (Line 46)

Switched Access BSE Workpapers - Hunt Group Arrangement

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Hunt Group Arrangement per Line	\$0.00	\$5.67	\$5.67 Page 1.A.1 (Line 37)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$0.4500	\$0.4500 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$0.5484	\$0.5484 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.2013	\$0.2013 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$0.4540	\$0.4540 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0172	\$0.0172 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$1.6709	\$1.6709 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.1145	\$0.1145 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.0725	\$0.0725 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$1.8407	\$1.8407 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$0.4760	\$0.4760 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$2.3167	\$2.3167 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$5.6700	\$5.6700 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$5.6700	\$5.6700 (Line 46)

Switched Access BSE Workpapers - CO Announcement

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	CO Announcement per Group	\$0.00	\$3,261.33	\$3,261.33 Page 1.A.1 (Line 38)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$258.8511	\$258.8511 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$315.4079	\$315.4079 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$115.8052	\$115.8052 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$261.1201	\$261.1201 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$9.9197	\$9.9197 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$961.1039	\$961.1039 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$65.8721	\$65.8721 (Line 15) * (Line 32)
35	Other	\$0.0000	\$41.7119	\$41.7119 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$1,058.7683	\$1,058.7683 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$273.8023	\$273.8023 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$1,332.5706	\$1,332.5706 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$3,261.3320	\$3,261.3320 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$3,261.3320	\$3,261.3320 (Line 46)

Switched Access BSE Workpapers - Uniform Call Distribution

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	UCD per Line	\$0.00	\$87.38	\$87.38 Page 1.A.1 (Line 41)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$6.9350	\$6.9350 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$8.4503	\$8.4503 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$3.1026	\$3.1026 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$6.9958	\$6.9958 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.2658	\$0.2658 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$25.7494	\$25.7494 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$1.7648	\$1.7648 (Line 15) * (Line 32)
35	Other	\$0.0000	\$1.1175	\$1.1175 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$28.3660	\$28.3660 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$7.3356	\$7.3356 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$35.7016	\$35.7016 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$87.3760	\$87.3760 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$87.3760	\$87.3760 (Line 46)

Switched Access BSE Workpapers - UCD with Queuing

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	UCD with Queuing per Line	\$0.00	\$17.47	\$17.47 Page 1.A.1 (Line 42)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$1.3863	\$1.3863 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$1.6892	\$1.6892 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.6202	\$0.6202 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$1.3984	\$1.3984 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0531	\$0.0531 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$5.1472	\$5.1472 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.3528	\$0.3528 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.2234	\$0.2234 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$5.6702	\$5.6702 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$1.4663	\$1.4663 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$7.1366	\$7.1366 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$17.4660	\$17.4660 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$17.4660	\$17.4660 (Line 46)

Switched Access BSE Workpapers - Three Way Call Transfer

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Three Way Call Transfer per Line	\$0.00	\$1.53	\$1.53 Page 1.A.1 (Line 43)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$0.1211	\$0.1211 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$0.1476	\$0.1476 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.0542	\$0.0542 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$0.1222	\$0.1222 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0046	\$0.0046 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$0.4497	\$0.4497 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.0308	\$0.0308 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.0195	\$0.0195 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$0.4954	\$0.4954 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$0.1281	\$0.1281 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$0.6235	\$0.6235 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$1.5260	\$1.5260 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$1.5260	\$1.5260 (Line 46)

Switched Access BSE Workpapers - Call Denial

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Call Denial per Line	\$0.00	\$13.36	\$13.36 Page 1.A.1 (Line 44)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$1.0602	\$1.0602 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$1.2919	\$1.2919 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.4743	\$0.4743 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$1.0695	\$1.0695 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0406	\$0.0406 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$3.9366	\$3.9366 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.2698	\$0.2698 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.1708	\$0.1708 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$4.3366	\$4.3366 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$1.1215	\$1.1215 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$5.4580	\$5.4580 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$13.3580	\$13.3580 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$13.3580	\$13.3580 (Line 46)

Switched Access BSE Workpapers - Code Denial

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Service Code Denial per Line	\$0.00	\$13.36	\$13.36 Page 1.A.1 (Line 45)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$1.0602	\$1.0602 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$1.2919	\$1.2919 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.4743	\$0.4743 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$1.0695	\$1.0695 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0406	\$0.0406 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$3.9366	\$3.9366 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.2698	\$0.2698 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.1708	\$0.1708 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$4.3366	\$4.3366 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$1.1215	\$1.1215 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$5.4580	\$5.4580 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$13.3580	\$13.3580 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$13.3580	\$13.3580 (Line 46)

Workpapers

1 Percent Forecasted Growth for Switched Access by Equipment Type (DMS, 1A, 5E)

	DMS	1A	5E	SOURCE
5 Switched Access	40.00%	0.00%	60.00%	11/90 Construction Budget View with 1AESS Investment Set to 0%.

9 Incremental Product Investment by Switch Type

	DMS	1A	5E	
14 Called Dir. No. Del. via DID per Trunk	\$210.18	\$562.92	\$196.71	SCIS (See Transmittal 1570)
15 Per 100 # Block	\$2.71	\$9.57	\$0.00	SCIS (See Transmittal 1570)
16 Make Busy Key	\$69.14	\$165.98	\$170.49	SCIS (See Transmittal 1570)
17 Message Desk (SMDI)	\$8,991.00	\$8,714.00	\$6,505.00	SCIS (See Transmittal 1570)
18 Message Waiting Indicator (Audible)	\$0.82	\$0.09	\$0.19	SCIS (See Transmittal 1570)
19 Message Waiting Indicator (Visual)	\$1.51	NA	\$0.28	SCIS (See Transmittal 1570)

23 Incremental Cost Product Investment by Analog and Digital

	Analog Invest. (1A)	Digital Invest. (DMS & 5E)	Total Invest.	
30 Called Dir. No. Del. via DID per Trunk	\$0.00	\$202.10	\$202.10	(Line 5) * (Line 14)
31 Per 100 # Block	\$0.00	\$1.08	\$1.08	(Line 5) * (Line 15)
32 Make Busy Key	\$0.00	\$129.95	\$129.95	(Line 5) * (Line 16)
33 Message Desk (SMDI)	\$0.00	\$7,499.40	\$7,499.40	(Line 5) * (Line 17)
34 Message Waiting Indicator (Audible)	\$0.00	\$0.44	\$0.44	(Line 5) * (Line 18)
35 Message Waiting Indicator (Visual)	NA	\$0.77	\$0.77	(Line 5) * (Line 19)

Workpapers -

39 Calculation of Recurring Rates

40

41

42 Monthly Costs

43

44

45 Called Dir. No. Del. via DID per Trunk

Direct

Direct +
Overheads

SOURCE

46 Per 100 # Block

47 Make Busy Key

48 Message Desk (SMDI)

49 Message Waiting Indicator (Audible)

50 Message Waiting Indicator (Visual)

51

52

53

54

55 Prices for BSEs without 1AESS

56

57 Called Dir. No. Del. via DID per Trunk

58 Per 100 # Block

59 Make Busy Key

60 Message Desk (SMDI)

61 Message Waiting Indicator (Audible)

62 Message Waiting Indicator (Visual)

63

64

65

66 Comparison of Costs with and without 1AESS

67

68 Product

69

70

71

72 Called Dir. No. Del. via DID per Trunk

73 Per 100 # Block

74 Make Busy Key

75 Message Desk (SMDI)

76 Message Waiting Indicator (Audible)

77 Message Waiting Indicator (Visual)

78

79

Premium

on-Premium

\$6.90

NA

\$0.05

NA

\$4.40

NA

\$255.00

NA

\$0.00

NA

\$0.00

NA

Total Cost
with 1AESS

Total Cost
without
1AESS

\$7.618

\$6.881

Transmittal 1571 and Line 45

\$0.056

\$0.037

Transmittal 1571 and Line 46

\$4.454

\$4.425

Transmittal 1571 and Line 47

\$255.082

\$255.353

Transmittal 1571 and Line 48

\$0.014

\$0.015

Transmittal 1571 and Line 49

\$0.024

\$0.026

Transmittal 1571 and Line 50

Workpapers

80 Comparison of Rates with and without 1AESS

81

82 Product

Prem. Rate
with 1AESS

Prem. Rate
without
1AESS

SOURCE

83

84

85

86 Called Dir. No. Del. via DID per Trunk

\$7.60

\$6.90

Transmittal 1571 and Line 57

87 Per 100 # Block

\$0.05

\$0.05

Transmittal 1571 and Line 58

88 Make Busy Key

\$4.45

\$4.40

Transmittal 1571 and Line 59

89 Message Desk (SMDI)

\$255.00

\$255.00

Transmittal 1571 and Line 60

90 Message Waiting Indicator (Audible)

\$0.00

\$0.00

Transmittal 1571 and Line 61

91 Message Waiting Indicator (Visual)

\$0.00

\$0.00

Transmittal 1571 and Line 62

Switched Access BSE Workpapers - Called Directory Number Delivery via DID

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Called Dir. No. Del. via DID per Trunk	\$0.00	\$202.10	\$202.10 Page 1.B.1 (Line 30)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$16.0405	\$16.0405 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$19.5452	\$19.5452 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$7.1762	\$7.1762 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$16.1811	\$16.1811 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.6147	\$0.6147 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$59.5576	\$59.5576 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$4.0820	\$4.0820 (Line 15) * (Line 32)
35	Other	\$0.0000	\$2.5848	\$2.5848 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$65.6097	\$65.6097 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$16.9670	\$16.9670 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$82.5766	\$82.5766 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$202.0980	\$202.0980 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$202.0980	\$202.0980 (Line 46)

Switched Access BSE Workpapers - Called Dir. No. Delivery via DID per 100 # Block

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Called No. Del. via DID per 100 # Block	\$0.00	\$1.08	\$1.08 Page 1.B.1 (Line 31)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$0.0860	\$0.0860 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$0.1048	\$0.1048 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$0.0385	\$0.0385 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$0.0868	\$0.0868 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.0033	\$0.0033 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$0.3195	\$0.3195 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$0.0219	\$0.0219 (Line 15) * (Line 32)
35	Other	\$0.0000	\$0.0139	\$0.0139 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$0.3519	\$0.3519 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$0.0910	\$0.0910 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$0.4429	\$0.4429 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$1.0840	\$1.0840 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$1.0840	\$1.0840 (Line 46)

Switched Access BSE Workpapers - Make Busy Key

1	Total Expense Factors	Acct. 221100	Acct. 221210	SOURCE
2		Analog	Digital	
3	Cost of Money	0.0741	0.0967	Transmittal 1570 Appendix A
4	State & Fed Taxes	0.0272	0.0355	Transmittal 1570 Appendix A
5	Depreciation	0.0932	0.0794	Transmittal 1570 Appendix A
6	Repair and Maintenance - Direct	0.0514	0.0801	Transmittal 1570 Appendix A
7	Repair and Maintenance - Fixed	0.0044	0.0030	Transmittal 1570 Appendix A
8				
9				
10	Administrative Expense Factors (applied to all other expenses)			
11				
12		Interstate		
13		Switched		
14				
15	Admin Factor	6.85%		Transmittal 1570 Appendix B
16	Other Factor	4.34%		Transmittal 1570 Appendix B
17	Overhead Factor	27.46%		Transmittal 1570 Appendix B
18				
19		Analog	Digital	Total
20		Invest.	Invest.	Invest.
21				
22	Make Busy Key	\$0.00	\$129.95	\$129.95 Page 1.B.1 (Line 32)
23				
24		Analog	Digital	Total
25		Expenses	Expenses	Expenses
26				
27	Depreciation	\$0.0000	\$10.3141	\$10.3141 (Line 5) * (Line 22)
28	Cost of Money	\$0.0000	\$12.5676	\$12.5676 (Line 3) * (Line 22)
29	State & Fed Taxes	\$0.0000	\$4.6143	\$4.6143 (Line 4) * (Line 22)
30	Repair and Maintenance - Direct	\$0.0000	\$10.4045	\$10.4045 (Line 6) * (Line 22)
31	Repair and Maintenance - Fixed	\$0.0000	\$0.3953	\$0.3953 (Line 7) * (Line 22)
32	Subtotal of Expenses	\$0.0000	\$38.2958	\$38.2958 Sum of (Line 27) to (Line 31)
33				
34	Administration	\$0.0000	\$2.6247	\$2.6247 (Line 15) * (Line 32)
35	Other	\$0.0000	\$1.6620	\$1.6620 (Line 16) * (Line 32)
36	Total Direct Recurring Costs	\$0.0000	\$42.1873	\$42.1873 Sum of (Line 32) to (Line 35)
37				- (Line 31)
38				
39	Overhead Loadings	\$0.0000	\$10.9098	\$10.9098 ((Line 17) * (Line 32)) + (Line 31)
40				
41	Total Direct and Indirect Unit Costs	\$0.0000	\$53.0972	\$53.0972 (Line 36) + (Line 39)
42				
43				
44	UNIT INVESTMENT			
45				
46	COE Switching	\$0.0000	\$129.9500	\$129.9500 (Line 22)
47				
48	Total Unit Investment	\$0.0000	\$129.9500	\$129.9500 (Line 46)